

# An Implementation Study of Shared Use Agreements Between School Districts and Communities in and Effort to Control Childhood Obesity in the State of Mississippi

Lolita Bolden, Ph.D. Student  
Jackson State University  
Department of Public Policy and  
Administration

# Mississippi Facts

- Mississippi rank 51<sup>st</sup> for protective factors against childhood obesity including healthy neighborhood environments
- More than 39.0% of children in Mississippi are overweight or obese
- About a quarter of 2-5 year olds and one-third of school-age children (including adolescents) are overweight or obese in the United States
- Only 23.0% of children participate in some form of physical activity for one hour a day

# Background on Shared Use Agreements

- A policy tool to deal with childhood obesity
- Formal or informal agreements between government or private entities establishing the terms and conditions for the shared use of public property
- Mississippi enacted a law (HB 540) in 2012 that encourages school districts to allow the public to use school property and facilities during non-school hours for recreational purposes

# Shared Use Benefits

- Advances health equity
- An efficient and economical use of public resources
- Increases community comradery
- Promotes health benefits
- An almost effortless strategy to implement
- Directs us to consider multiple levels of social change that closes the gap between healthy lifestyles of the disadvantaged and obesity and its consequences
- Builds upon assets a community already has

# Research Questions

- Has there been any impact of the HB 540 on shared use agreement expansion?
- Is there any relation between formal shared use agreements and poverty level?
- How can local communities encourage and facilitate active lifestyles for residents?
- How can we increase access to as well as the use of gyms and recreational facilities?

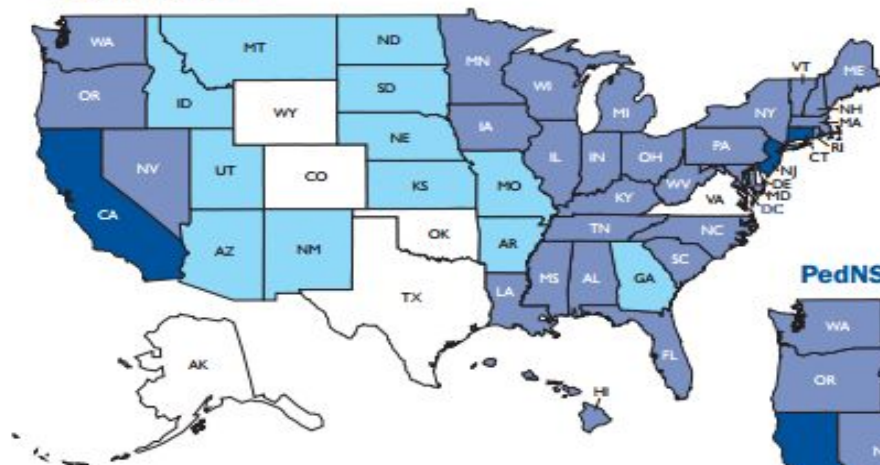
## State Trends: From 2008 to 2011, obesity rates decreased among this age group in 18 states and the U.S. Virgin Islands, and increased in only three states

OBESE — 2 TO 5 YEARS, 2011-2012 — NHANES <sup>53</sup>	
Total	8.4%
White	3.5%
Black	11.3%
Latino	16.7%

TRENDS IN OBESITY RATES AMONG CHILDREN 2 TO 4 YEARS OF AGE, BY RACE AND ETHNICITY, 1998-2011 — PEDNSS <sup>58</sup>			
Race/Ethnicity	1998	2003	2011
Total	13.0%	15.2%	14.7%
White	10.5%	13.1%	14.7%
Black	11.1%	12.7%	11.8%
Latino	18.1%	19.7%	18.7%
Asian/Pacific Islander	14.3%	13.6%	11.7%
American Indian/Alaska Native	16.3%	19.0%	21.1%

NOTE: PedNSS data 1998 through 2011. SOURCE: Adopted from Pan et al., 2015

PedNSS 1998<sup>59</sup>

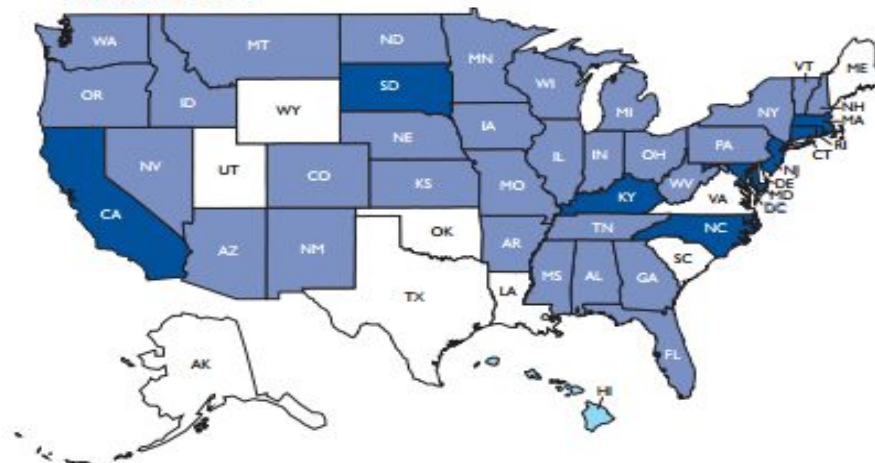


□ No Data    □ <10%    □ ≥10% & <15%    □ ≥15%

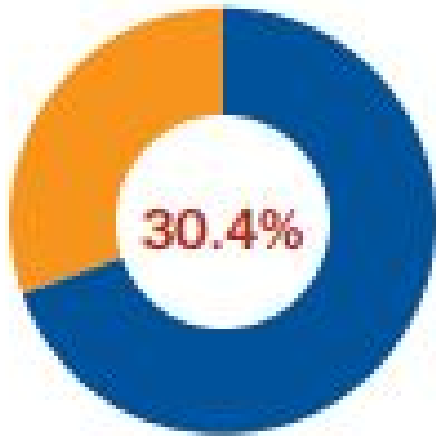
Interactive maps and timelines for 1989-2011 are available at [stateofobesity.org](http://stateofobesity.org).

The data for PedNSS is based on actual measurements rather than self-reported data.

PedNSS 2011



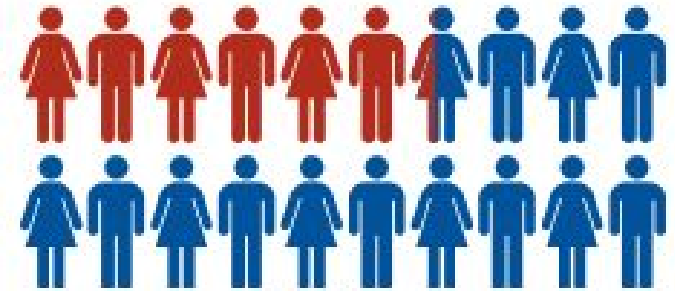
# Socioeconomics and Obesity Among Children



No High School  
Diploma

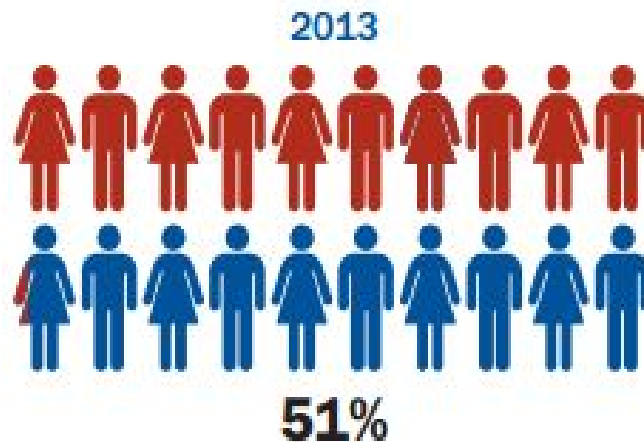
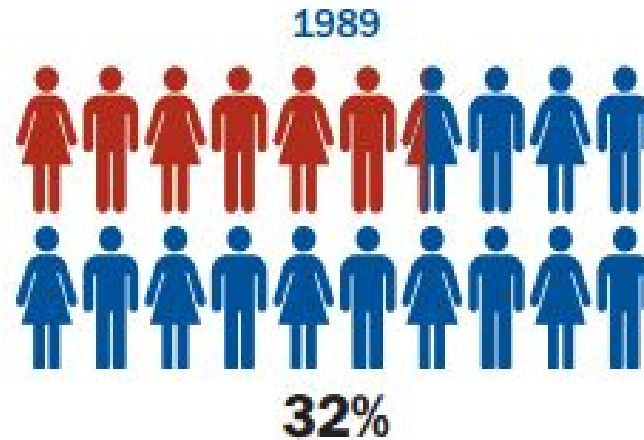


College Degree



Girls Ages 10  
to 17 in Lower  
Socioeconomic  
Circumstances

# Percentage of Students from Low Income Families





# Percent of Students in Grades 9-12 Who Are Obese by Total†



† Obese is defined as body mass index (BMI)-for-age and sex  $\geq$  95th percentile based on the 2000 CDC growth chart; BMI was calculated from self-reported weight and height (weight [kg]/ height [m<sup>2</sup>]) **Data Source** [Youth Risk Behavior Surveillance System](#)

# Methodology

- Sample/Shared Use Agreements
- School districts, community organizations and state agencies
- Sampling size of 16 counties - Determination of high rates of obesity and lower socio-economic status and income in the state
- Survey of school districts

# Findings

- Prior House Bill 504, 11 shared use agreements were implemented
- Post House Bill 504, 20 shared use agreements have been implemented in Mississippi

## Location Analysis

- Counties selected due to the high rates of obesity ( $\geq 35\%$ ) and lowest income in the state ( $\geq 75\%$ )
- Lower income status classified based on 50% or greater of students eligible for free and reduced priced school lunch
- Sample size too small for a quantitative analysis

## Survey Results

- 10% of schools were willing to allow after-hours use but were not willing to sign a formal agreement

# Findings

- Of 16 Mississippi counties, that also includes several school districts, 31 shared use agreements have been implemented formally or informally
- Five Jackson and Clinton Public Schools have received funding to implement agreements that include: Pecan Park, East Side, Chastain, McCleod, and Forest Hill

# Findings

Type of Agreement	Frequency
Formal	25 (80.6%)
Informal	6 (19.4%)
Total	31 ( 100.0 %)

Promotion of HB 540 has been significant in encouraging formal agreements between communities and schools

# Findings

## Policy Present Prior to 2012 (HB 540)

Impact of HB 540	Frequency
Existing	11 (35.5 %)
Newly established	20 (64.5 %)
Total	31 (100.0 %)

Promotion of HB 540 has been significant in expanding the Shared Use Agreement statewide

# Results/Findings

## % reduced meals, 2010-2011

Range (%)	Frequency
90-100	16 (51.6%)
80-89	2 (6.5%)
70-79	4 (12.9%)
60-69	3 (9.7%)
50-59	0 (0.0%)
40-49	0 (0.0%)
30-39	2 (6.5%)
20-29	2 (6.5%)
10-19	0 (0.0%)
0-9	2 (6.5%)
Total	31 ( 100.0 %)

The school districts with more than 90% reduced meals, takes 51.6% of the participating districts

# Findings

Any relation with poverty level?

Range (%)	Frequency
No	6 (19.4 %)
≥ 50% (a)	8 (25.8 %)
≥ 75% (a)	17 (54.8 %)
Total	31 (100.0 %)

(a) Lower income status classified based on 50% or greater of students eligible for free and reduced price school lunch

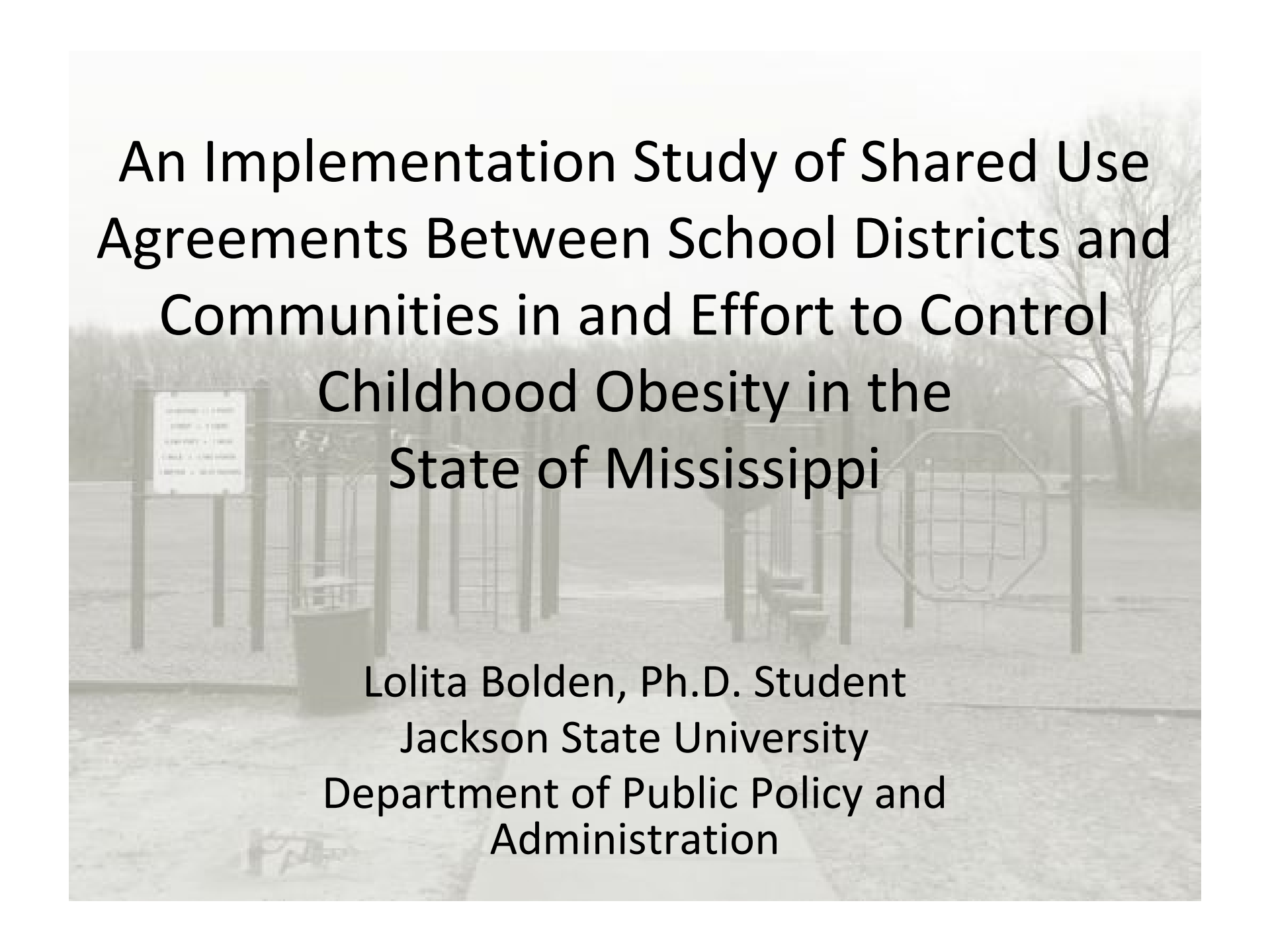


# Findings

- Shared use agreements have been promoted in controlling children obesity nationwide
- The implementation of shared use agreements has been active after the HB 540 passed in 2012
- The implementation of shared use agreements forges relationships between communities and governmental entities to keep costs down and communities healthy
- Shared use agreements directs us to consider multiple levels of social change that closes the gap between healthy lifestyles of the disadvantaged and obesity and its consequences

# Conclusion

- Mississippi has taken great strides to combat obesity
- Schools are now offering healthier lunches: combi-ovens have replaced deep fryers; more fruits, vegetables, and whole grains are offered at lunch; and skim or low-fat milk is offered instead of high-fat milk
- Opening schools for recreation reduces, and in many cases eliminates vandalism, theft, and burglary
- Mini grants for shared use implementation are great, but do not produce sustainable long-term results



# An Implementation Study of Shared Use Agreements Between School Districts and Communities in and Effort to Control Childhood Obesity in the State of Mississippi

Lolita Bolden, Ph.D. Student  
Jackson State University  
Department of Public Policy and  
Administration